

<b>NWS CHANGE FORM</b> <b>PART A</b>			1. DATE SUBMITTED 21 June 2000 received 6/26/00		
This form is in three parts. Submitters must complete unshaded blocks in Part A and as much of Part B as possible. WSH will complete Part C (implementation details). If there is no specific required change date, enter 60 days from date submitted. Address questions to NWS Change Management at (301) 713-1373. Submit change requests to the NWSRC mailbox (External: NWSRC@noaa.gov).					
2. ORIGINATOR OFFICE  APO	3. SUBMITTING AUTHORITY Name: Ward Seguin Routing Code: W/APO1	4. COGNIZANT TECHNICAL INDIVIDUAL Name: Patty Miller/ Mike Barth Routing Code: FSL Phone: (303)497-6365 , -6365	5. ORIGINATOR TRACKING NUMBER  P426_APO_A100073		
6. SYSTEMS AFFECTED BY CHANGE  <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> ASOS     <input checked="" type="checkbox"/> AWIPS     <input type="checkbox"/> CRS     <input type="checkbox"/> NEXRAD     <input type="checkbox"/> OT HER (specify) _____         </div> <div style="text-align: right;"> <input type="checkbox"/> DATA PRODUCTS (Complete Data Products Supplement)         </div> </div>			7. WSH TRACKING NUMBER  <div style="text-align: center;"> <b>NWS 607</b>          6/28/00       </div>		
8. TITLE OF CHANGE  Fix performance problems in writing MSAS/QC netCDF files					
9. TYPE OF CHANGE  <input type="checkbox"/> HARDWARE <input checked="" type="checkbox"/> SOFTWARE <input type="checkbox"/> DOCUMENTATION ONLY		10. SITES AFFECTED (Attach Part B, Page 2, if needed) All sites. [First to be beta tested at TQR, EHV, SLC]			
11. STATEMENT OF REQUIREMENT, PROBLEM, OR DEFICIENCY OF EXISTING SYSTEM (Include problem report reference numbers.)  Fix performance problems encountered by having MSAS/QC programs running on AS2 trying to write netCDF files on /data/fxa. The performance can be greatly improved by writing the netCDF files locally (in /awips/fxa/ldad/MSAS) then copying them to /data/fxa directories, e.g., before this fix the MSAS program qcstg1_2 can process approximately 50 stations/minute; after the fix, qcstg1_2 can process around 450 stations/minute.  Associated DCS/DRs:   - DCS_1481, Release 5.0. - DR_5624, all other releases.					
12. KNOWN OR PROPOSED SOLUTION (Include source and description of new features or data products.)  Modify 7 MSAS scripts to   1) write netCDF files to /awips/fxa/ldad/MSAS; 2) copy the files to /data/fxa; and 3) delete the temporary files from /awips/fxa/ldad/MSAS.  The change will work with any 4.2 or 4.3 build, i.e. 4.2.6, 4.3.1, and/or 4.3.3.					
13. ALTERNATE SOLUTIONS  None					
14. REQUIRED CHANGE DATE 23 June 2000		15. RATIONALE FOR REQUIRED CHANGE DATE (Include proposed priority, if known.)  Severe performance degradation.			
<b>CCB/PMC/CMB DECISION</b>					
16. DECISION AUTHORITY LEVEL		<input type="checkbox"/> CCB LEVEL ONLY <input checked="" type="checkbox"/> FAST TRACK <input type="checkbox"/> PMC or NWS CMB DECISION REQUIRED			
17. CCB LEVEL DECISION		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> APPROVED   <input type="checkbox"/> RECOMMEND APPROVAL   <input type="checkbox"/> DISAPPROVED         </td> <td style="width: 50%; vertical-align: top;">           SIGNATURE              DATE SIGNED         </td> </tr> </table>		<input type="checkbox"/> APPROVED  <input type="checkbox"/> RECOMMEND APPROVAL  <input type="checkbox"/> DISAPPROVED	SIGNATURE   DATE SIGNED
<input type="checkbox"/> APPROVED  <input type="checkbox"/> RECOMMEND APPROVAL  <input type="checkbox"/> DISAPPROVED	SIGNATURE   DATE SIGNED				
<b>FOR USE ONLY WHEN PMC or NWS CMB DECISION REQUIRED</b>					
18. PMC OR NWS CMB DECISION		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> APPROVED   <input type="checkbox"/> DISAPPROVED         </td> <td style="width: 50%; vertical-align: top;">           SIGNATURE              DATE SIGNED         </td> </tr> </table>		<input type="checkbox"/> APPROVED  <input type="checkbox"/> DISAPPROVED	SIGNATURE   DATE SIGNED
<input type="checkbox"/> APPROVED  <input type="checkbox"/> DISAPPROVED	SIGNATURE   DATE SIGNED				

<b>NWS CHANGE FORM PART B</b>		1. ORIGINATOR TRACKING NUMBER P426_APO_A100073	
All RC/ECP submissions must also address the following information. Indicate if any areas are unknown or do not apply. State why information is unknown and when it will be available. Attach extra pages if necessary, referencing each applicable subject.		2. WSH TRACKING NUMBER	
<b>FUNDING INFORMATION</b>			
Estimate costs and indicate known sources of funding. (Include travel time, installation time, administrative time, and software development time when applicable.)		3. SOURCE OF FUNDING	4. TOTAL COST \$
5. DEVELOPMENT COSTS (Estimate development costs) This cost is associated with R5.0 development cost.			AMOUNT
6. OPERATIONAL TEST AND EVALUATION COSTS (Estimate test and evaluation costs) N/A			AMOUNT
7. PRODUCTION COSTS (Include acquisition, kit proofing, spares, delivery, and documentation costs) N/A			AMOUNT
8. COMMUNICATIONS SERVICE/CIRCUITS COSTS (Include installation and recurring costs)			AMOUNT
9. IMPLEMENTATION SUPPORT COSTS (Include travel, installation, and administrative costs) N/A			AMOUNT
9A. LIFE CYCLE SUPPORT COSTS (Less communications service/circuits) N/A			AMOUNT
<b>SUPPORTING INFORMATION AND SCHEDULES</b> Provide detailed information needed to implement the requested change.			
10. DEVELOPMENT STATUS/SCHEDULE (Major milestones such as Start, Beta Test, and OT&E)  N/A		11. PRODUCTION STATUS/SCHEDULE (Major milestones such as Solicitation, Contract Start Date, Delivery Date, Kit Proofing, etc.)	
12. IMPLEMENTATION/RETROFIT SCHEDULE		13. FACILITY INFORMATION (Attach facility drawings/plans.)	
14. COMMUNICATIONS INSTALLED (Type required, who will order, and associated hardware required; attach Part B, Page 2, if needed.)		15. COMMUNICATIONS SERVICE/CIRCUITS TO BE REMOVED	
16. REQUIRED CLEARANCES, WAIVERS, AND LICENSES (Include person or organization responsible for obtaining each)		17. COORDINATION OF CHANGE WITH OTHER CHANGES The patch is intended for R4.2.6, R4.3.1, 4.3.3. sites.	
18. PHYSICAL ITEMS AND DOCUMENTS AFFECTED (Include part, serial, and document numbers. Attach Part B, Page 2, if needed.)		19. STAFF RESOURCE IMPACTS (Skills and workload impact on maintainers, operators, and managers.)	
20. LOGISTICS IMPACTS (Include facilities, maintenance, training, and support equipment impacts.)		21. OPERATIONAL IMPACTS (Include continuity and back up needs and plans.)	
22. ADDITIONAL MAJOR CHANGE ACTIVITIES (Include who will accomplish each of them and staff hours required.) - <b>Testing :</b> - Tested on the FSL fslc system (4.3.1), and alpha tested at PQR (4.3.1). This testing should suffice for 4.2 sites also, since the scripts changed for this fix are identical in 4.2 and 4.3. - No NMT testing needed. The changes have already been alpha tested at a field site. - <b>RC Closure criterion:</b> The software patch is posted on the NOAA1 server and all AWIPS sites are notified by the SST. See Attachment A for verification.			

NWS CHANGE FORM PART B - PHYSICAL ITEM AND DOCUMENT IMPACT MATRIX SUPPLEMENT						1. ORIGINATOR TRACKING NUMBER P426_APO_A100073			
This information is required prior to publication of Engineering Modification Notes and Software Release Notes. List physical items to be replaced and specify any changes in related documentation. (Submitters should complete this information, if known. WSH will assist.)						2. WSH TRACKING NUMBER			
3. ITEM NAME, CIRCUIT TYPE, SOFTWARE VERSION, OR SITE LOCATION	4. REMOVE REPLACE MODIFY	5. SUPERSEDED ITEM OR CONFIGURATION		6. SUPERSEDING PART NUMBER OR NEW CONFIGURATION	7. DOC TYPE	8. SUPERSEDED DOCUMENT		9. SUPERSEDING DOCUMENT	
		A. PART NUMBER OR CONFIGURATION	B. SERIAL NUMBER(S) OR COMMENTS			A. IDENTIFIER	B. REV	A. IDENTIFIER	B. REV
N/A									



## **Attachment A**

### **Verification and Scripts (added or changed) Information**

#### **1. Verification (for closure):**

To verify, run with the old versions of the scripts and note the time it takes qcstg1\_2 to run [by contrasting the finish time stamped on the /data/logs/fxa/ldad/MSAS/qcstg1\_2-meso.out.\*\_xx files with the start time (the "\_xx" part of the name gives the minute they were created).

Compare that time with the improvement given by the changed scripts.

After installation, sites should also check that QC files are still being produced in /data/fxa/LDAD/mesonet/qc.

#### **2. Scripts added or changed:**

FSL\_surface1h  
WFOA\_MSAS\_QCstage1\_2\_late.run  
WFOA\_MSAS\_QCstage1\_2.run  
WFOA\_MSAS\_Surface.run  
FSL\_qcrun5m  
FSL\_qcstg3.run  
WFOA\_a2utime.sh (new)

Installation instructions:

Copy the scripts to /awips/fxa/ldad/MSAS on as2 (and as1), and then move FSL\_qcstg3.run to /awips/fxa/ldad/MSAS/qcstg3. Check the scripts that for the correct ownership, privileges, etc. The scripts should be owned by ldad, with group (fxalpha) execute privileges.

Un-installation instructions:

Save the original scripts, and copy back to /awips/fxa/ldad/MSAS on as2 (and as1), and then move FSL\_qcstg3.run to /awips/fxa/ldad/MSAS/qcstg3.